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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,265	03/18/2004	Nikhil Jain	030259U1	7450

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QUALCOMM INCORPORATED
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EXAMINER	
TAYLOR, BARRY W	
ART UNIT	**PAPER NUMBER**
2617	

NOTIFICATION DATE	DELIVERY MODE
10/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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nanm@qualcomm.com

Office Action Summary	Application No.	Applicant(s)	
	10/804,265	JAIN ET AL.	
	Examiner	Art Unit	
	Barry W. Taylor	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-11,13-16 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-11,13-16 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-2, 4-5, 7-11, 13-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn et al (6,681,111 hereinafter Ahn) found in co-pending application 10/077,556 now abandoned in view of Marin et al (6,298,232 hereinafter Marin).

Regarding claim 1. Ahn teaches a general global gateway configured to support communications between a first network and a second network (see CDMA and GSM figure 1) to enable a mobile station subscribed in the first network to communicate using

the second network (title, abstract, col. 2 lines 36 – 46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47), comprising:

a database configured to store an identity of the mobile station (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47); and

a logic unit configured to execute program logic to obtain authentication information from the first network based on the identity of the mobile station (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47) and further configured to determine whether authentication parameters from the MS satisfy GGG authentication criteria (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47).

According to Applicants, Ahn does not teach storing authentication information for subsequent accesses by the mobile station (see paper dated 8/1/07).

Marin teaches voice message notifications to a mobile subscriber regardless of the type of network in which the mobile subscriber is located by using an interworking function that translates a first message from a first protocol associated with a first network into a second message according to a second protocol associated with a second network wherein the first and second networks may be a GSM network and an IS-41 network (title, abstract, col. 2 line 54 – col. 3 line 24). Marin teaches the interworking function (IWF) has a database for subscribers who are roaming in networks, other than their home network (figures 3-4, col. 4 lines 6-49). Marin shows

the exemplary database record in the IWF database for tracking a roaming subscriber (see figure 3). Therefore, by retrieving the record from the IWF database, the IWF has all of the information necessary for translation of the signaling messages between both networks (i.e. roaming from GSM to an IS-41 network --- figure 5 or roaming from an IS-41 network to a GSM network --- figure 11).

It would have been obvious for any one of ordinary skill in the art at the time of the invention was made to incorporate the exemplary database as taught by Marin into the teachings of Ahn in order to allow the locations of mobile stations to be properly tracked as they move from one network to another thus making it easier to provide voice message notifications to roaming subscribers as taught by Marin.

Regarding claim 2. Ahn further shows a location register configured to store a location of the MS to enable a call incoming to the MS from the first network to route the incoming call to the MS through the GGG (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47). Marin also teaches a location register configured to store a location of the MS to enable a call incoming from the first network to route the incoming call to the mobile station through the GGG (i.e. see IWF in figures 3-5 and 11, col. 4 lines 6-49).

Regarding claim 4. Ahn teaches a service center configured to send and receive messages to and from the second network according to a message format of the service center (i.e. Ahn describes a short message service (SMS) of the roaming service where the IRGS functions as the SMC/short message center --- col. 12 lines 39-42). Marin also teaches service center (see SC in figures 5 and 11 configured to send

and receive messages to and from the second network according to a message format of the service center, col. 4 lines 6-49, col. 4 line 50 – col. 5 line 2, col. 5 line 3 – col. 6 line 4, col. 8 lines 17-36).

Regarding claim 5. Ahn teaches a second location register configured to store location of the MS to enable a call outgoing from the MS to the first network to route the outgoing call from the MS through the GGG (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47). Marin also teaches second location register (see figure 3, col. 4 lines 6-49 wherein IWF maintains location information relating to both home network field and visited network field wherein home network can be GSM or IS-41 and visited network can be GSM or IS-41).

Regarding claim 7. Ahn teaches the service center is a short message service center (i.e. Ahn describes a short message service (SMS) of the roaming service where the IRGS functions as the SMC/short message center --- col. 12 lines 39-42). Marin also teaches the SC (i.e. Service Center) is a short message service center (col. 1 lines 20-64, col. 4 line 6 – col. 5 line 57)

Regarding claim 8. Ahn teaches wherein the messages deliver services that are provided by the first network that may not be provided by the second network (col. 1 lines 44-54). Marin teaches the messages deliver services that are provided by the first network that may not be provided by the second network (col. 2 lines 54-63, col. 2 line 64 – col. 3 line 25, col. 4 lines 6-49

Regarding claim 9. Ahn teaches wherein the SMSC is configured to send and receive SMS messages to validate a subscription in a network (i.e. Ahn describes a short message service (SMS) of the roaming service where the IRGS functions as the SMC/short message center --- col. 12 lines 39-42). Marin teaches service center/gateway mobile switching center uses SMS messages to validate subscribers (col. 1 lines 38-64, col. 4 lines 50-67).

Regarding claim 10. Ahn teaches a general global gateway configured to support communications between a first network and a second network (see CDMA and GSM figure 1) to enable a mobile station subscribed in the first network to communicate using the second network (title, abstract, col. 2 lines 36 – 46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47), comprising:

means for storing an identity of the mobile station (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47); and

means for executing program logic to obtain authentication information from the first network based on the identity of the mobile station (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47) and determine whether authentication parameters from the MS satisfy GGG authentication (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47).

According to Applicants, Ahn does not teach storing authentication information for subsequent accesses by the mobile station (see paper dated 8/1/07).

Marin teaches voice message notifications to a mobile subscriber regardless of the type of network in which the mobile subscriber is located by using an interworking function that translates a first message from a first protocol associated with a first network into a second message according to a second protocol associated with a second network wherein the first and second networks may be a GSM network and an IS-41 network (title, abstract, col. 2 line 54 – col. 3 line 24). Marin teaches the interworking function (IWF) has a database for subscribers who are roaming in networks, other than their home network (figures 3-4, col. 4 lines 6-49). Marin shows the exemplary database record in the IWF database for tracking a roaming subscriber (see figure 3). Therefore, by retrieving the record from the IWF database, the IWF has all of the information necessary for translation of the signaling messages between both networks (i.e. roaming from GSM to an IS-41 network --- figure 5 or roaming from an IS-41 network to a GSM network --- figure 11).

It would have been obvious for any one of ordinary skill in the art at the time of the invention was made to incorporate the exemplary database as taught by Marin into the teachings of Ahn in order to allow the locations of mobile stations to be properly tracked as they move from one network to another thus making it easier to provide voice message notifications to roaming subscribers as taught by Marin.

Regarding claim 11. Ahn teaches means for storing a location of the MS to enable a call incoming to the MS from the first network to route the incoming call to the MS through the GGG (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines

17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47). Marin also teaches means for storing a location of the mobile station (col. 4 lines 6-49).

Regarding claim 13. Ahn teaches wherein the SMSC is configured to send and receive SMS messages to validate a subscription in a network (i.e. Ahn describes a short message service (SMS) of the roaming service where the IRGS functions as the SMC/short message center --- col. 12 lines 39-42). Marin teaches sending and receiving short message service messages to and from the second network (col. 1 lines 38-64, col. 4 lines 50-67).

Regarding claim 14. Ahn further shows a location register configured to store a location of the MS to enable a call incoming to the MS from the first network to route the incoming call to the MS through the GGG (see 300 figure 1, col. 2 lines 36-46, col. 3 lines 62-65, col. 4 lines 17-33, col. 5 lines 28-46, col. 6 lines 32-54, col. 12 lines 39-47). Marin teaches storing a location of the mobile station (col. 4 lines 6-49).

Method claim 15 is rejected for the same reasons as apparatus claim 1 since the recited apparatus would perform the claimed method steps.

Method claim 16 is rejected for the same reasons as apparatus claim 2 since the recited apparatus would perform the claimed method steps.

Regarding claim 18. Ahn teaches communicating directly from the MS to the first network after the MS has been authenticated (col. 2 lines 36-46).

Method claim 19 is rejected for the same reasons as apparatus claim 9 since the recited apparatus would perform the claimed method steps.

Method claim 20 is rejected for the same reasons as apparatus claim 2 since the recited apparatus would perform the claimed method steps.

Computer claim 21 is rejected for the same reasons as apparatus claim 1 and method claim 15 since the recited apparatus and method would perform the claimed program steps.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn et al (6,681,111 hereinafter Ahn) found in co-pending application 10/077,556 now abandoned in view of Marin et al (6,298,232 hereinafter Marin) further in view of Hronek (6,564,055).

Regarding claim 6. Ahn and Marin do not appear to use the term Internet.

Hronek teaches an intelligent roaming database (title, abstract) wherein the Internet is used (col. 10 lines 35-46) to allow for location information to be obtained when a MS roams into a new region, as well as, offering MS low cost plans pertaining to specific roaming regions (col. 13 lines 31-40).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Hronek into the teachings of Ahn and Marin in order to provide MS services when they roam into a new region, as well as, saving MS user money by offering the least expensive service plan to the MS user.

Response to Arguments

3. Applicant's arguments with respect to claims 1-2, 4-11, 13-16 and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost, can be reached at (571) 272-7872. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (**571-273-8300**).

Barry W. Taylor
Art Unit 2617

Barry W. Taylor 9/21/07

BARRY TAYLOR
PRIMARY EXAMINER

REPLACEMENT SHEET

Approved BWT 9/21/07

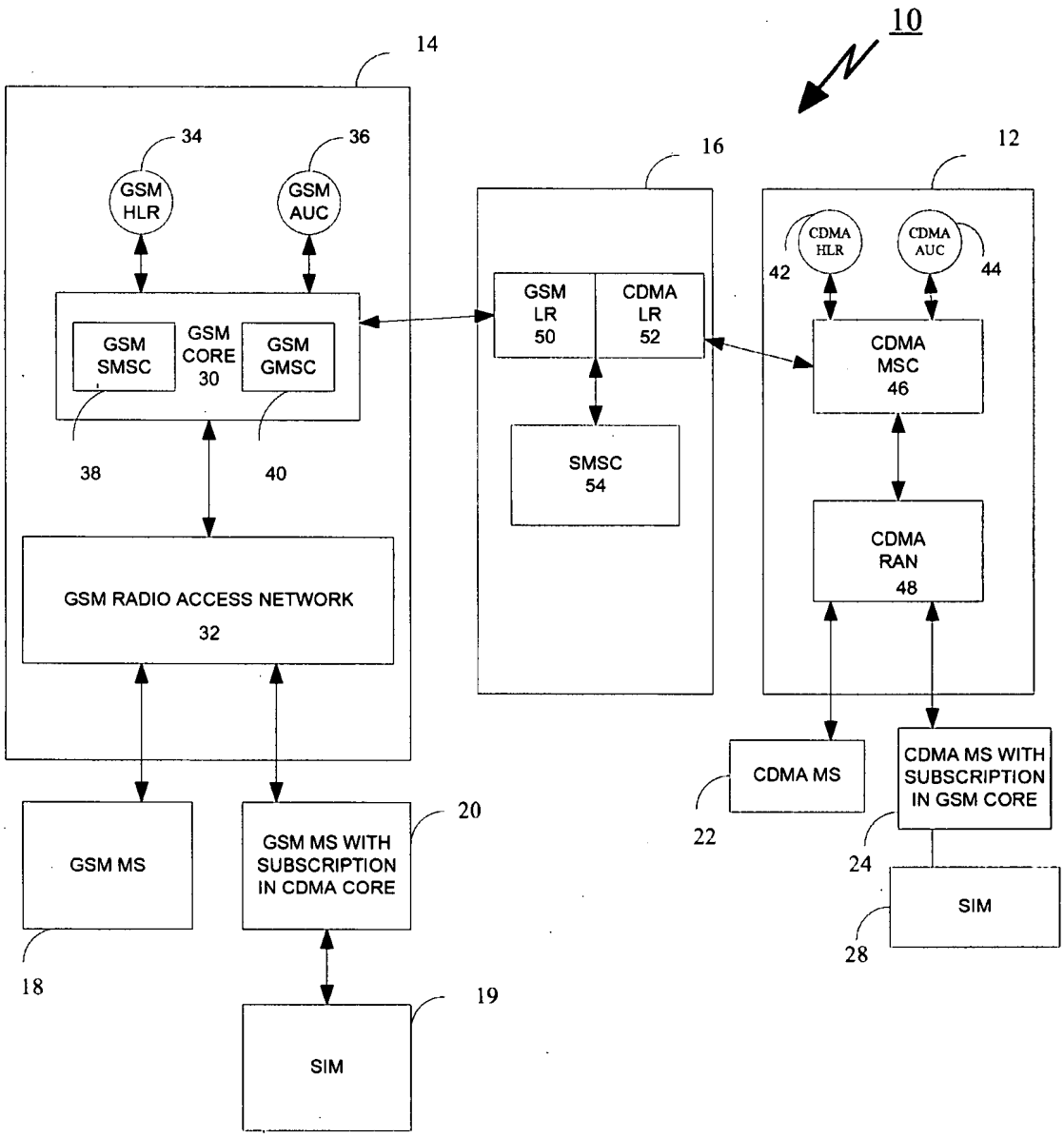

FIGURE 1

Approved
But
9/21/07

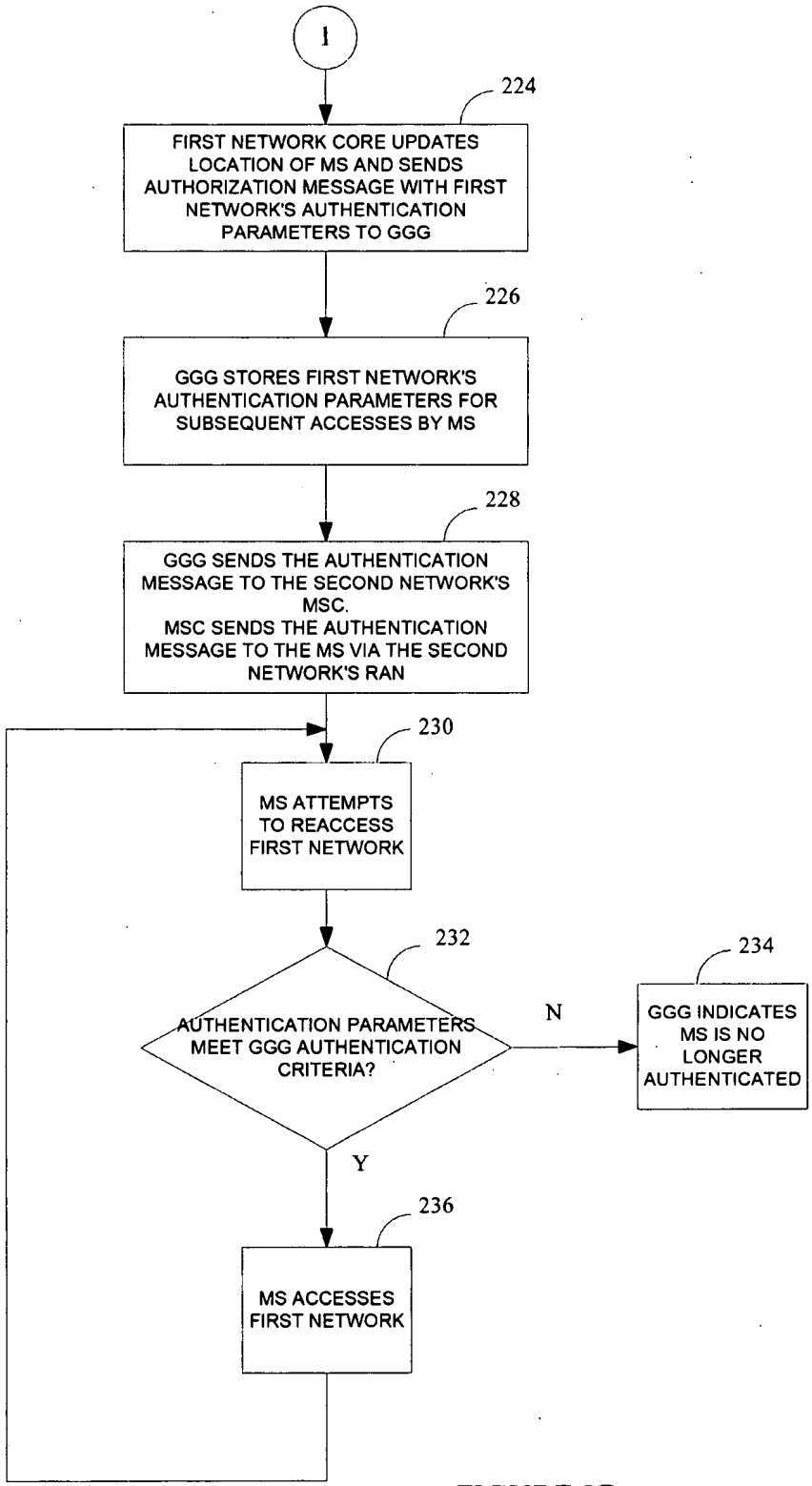

FIGURE 2B